

TA-FE610R

SERVICE MANUAL

AEP Model



SPECIFICATIONS

Amplifier section

DIN power output

80 W + 80 W (4 ohms at 1 kHz)
60 W + 60 W (8 ohms at 1 kHz)

Total harmonic distortion

Less than 0.008% (at 10 W output)

Frequency response

PHONO (20 Hz - 20 kHz): RIAA equalization curve
±0.5 dB
TUNER, CD AUX, TAPE1/DAT, TAPE2/MD:
7 Hz - 100 kHz dB

S/N (network A)

PHONO: 90 dB
TUNER, CD, AUX, TAPE1/DAT, TAPE2/MD: 105 dB

Output voltage / impedance

REC OUT: 150 mV, 1 kilohm
PHONES: 10 mW (at 8 ohms)

Speakers impedance

4 - 16 ohms, 8 - 16 ohms (SPEAKERS A+B)

Damping factor

100 (8 ohms, 1 kHz)

General

System

Power amplifier: Pure-complementary SEPP OCL
power amplifier with all stages directly coupled
Preamplifier: Low-noise, equalizer amplifier

Power requirements

220 - 230 V AC, 50/60 Hz

Power consumption

180 W

Dimensions (approx.) (w/h/d)

430 × 135 × 365 mm incl. projecting parts and controls

Mass (approx.)

6.4 kg

Supplied accessories

Remote commander (remote) (1) RM-S316
Sony batteries SUM-3 (NS) (2)

Design and specifications are subject to change without notice.

INTEGRATED STEREO AMPLIFIER



SONY®

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SAFETY-RELATED COMPONENT WARNING !!

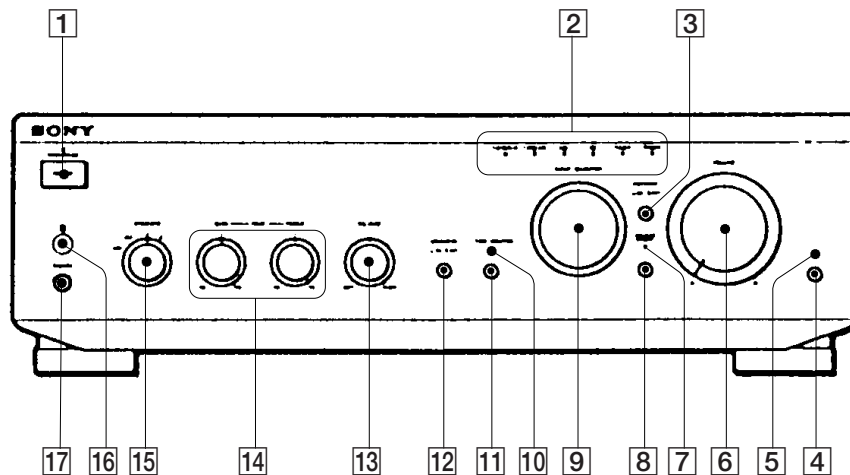
COMPONENTS IDENTIFIED BY MARK \triangle OR DOTTED LINE WITH MARK \triangle ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

SECTION 1 GENERAL

This section is extracted from instruction manual.

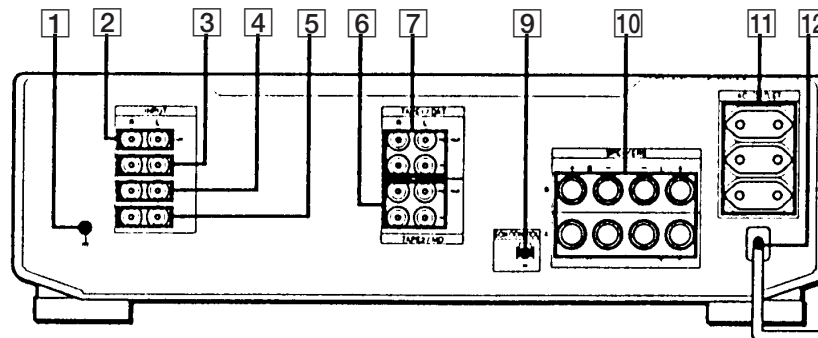
location of parts and controls

FRONT PANEL



- | | |
|----------------------------|--------------------------------|
| 1 POWER switch | 10 TAPE MONITOR indicator |
| 2 INPUT SELECTOR indicator | 11 TAPE MONITOR switch |
| 3 SUBSONIC switch | 12 LOUDNESS switch |
| 4 EON LINK switch | 13 BALANCE control |
| 5 EON LINK indicator | 14 TONE (BASS, TREBLE) control |
| 6 VOLUME control | 15 SPEAKERS selector |
| 7 SOURCE DIRECT indicator | 16 Remote control sensor |
| 8 SOURCE DIRECT switch | 17 PHONES jack |
| 9 INPUT SELECTOR control | |

REAR PANEL



- | | |
|------------------------------|------------------|
| 1 \varnothing (SIGNAL GND) | 7 TAPE1/DAT |
| 2 AUX | 9 EON CONTROL IN |
| 3 CD | 10 SPEAKERS A/B |
| 4 TUNER | 11 AC OUTLET |
| 5 PHONO | 12 Mains lead |
| 6 TAPE2/MD | |

SECTION 2 ELECTRICAL ADJUSTMENT

Bias Adjustment

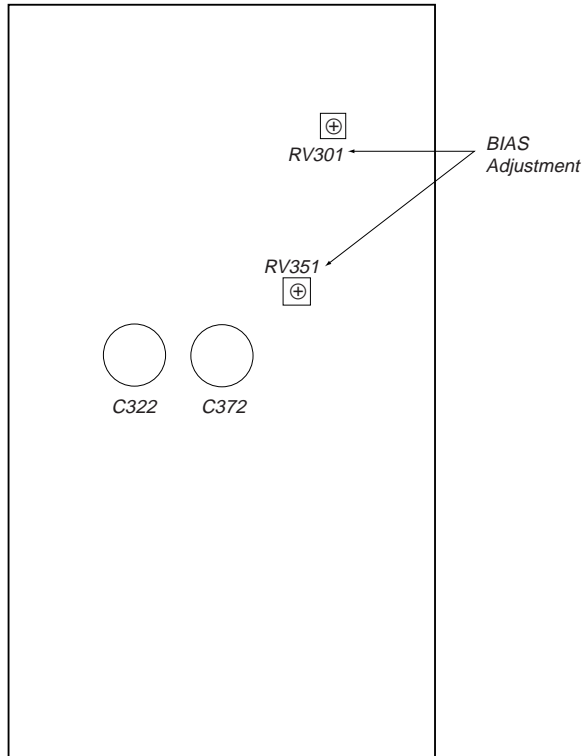
1. Rotate fully the bias adjusting semi-fixed resistors (RV301, RV351) to the MIN position (counterclockwise).
2. Connect a digital voltmeter to the CN406 and CN407.

	1 pin	3 pin
CN406	—	+
CN407	+	—

3. Set the slide regulator to 0V, and press the POWER button (ON) on the set.
4. Raise gradually the slide regulator voltage up to the rated voltage (230 V).
5. At this time, confirm that the SP relay is turned on (it will click).
6. Adjust the RV301 and RV351 so that a reading of digital voltmeter is 10 mV to 15 mV.
7. Return the slidack to 0 V, and press the POWER button (OFF) on the set.

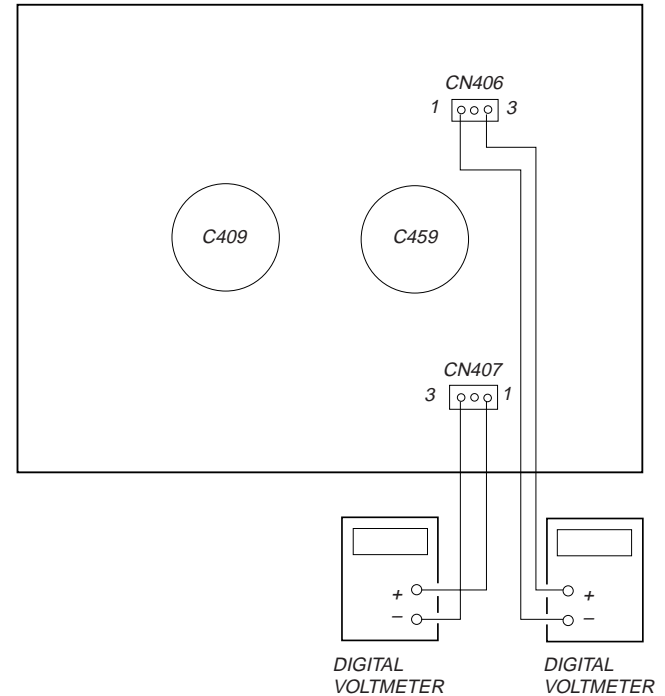
Adjustment Location :

[MAIN A BOARD] — COMPONENT SIDE —



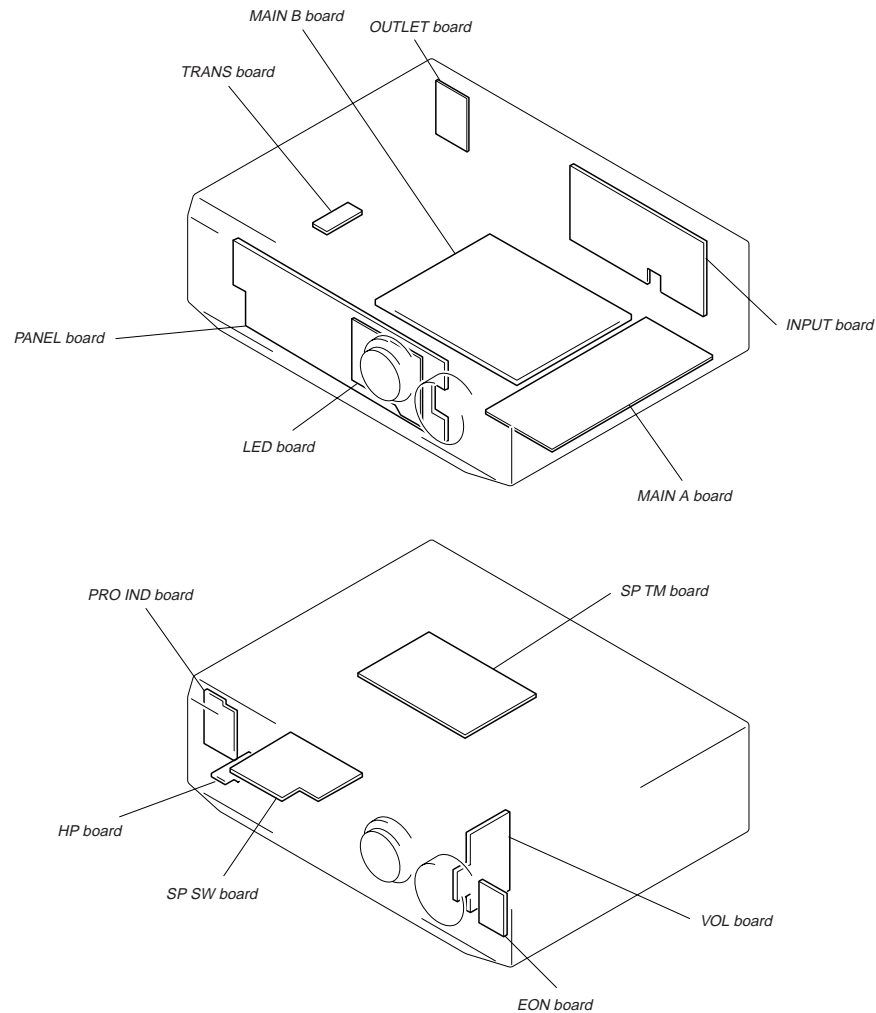
Test Point Location :

[MAIN B BOARD] — COMPONENT SIDE —



SECTION 3 DIAGRAMS

3-1. CIRCUIT BOARDS LOCATION



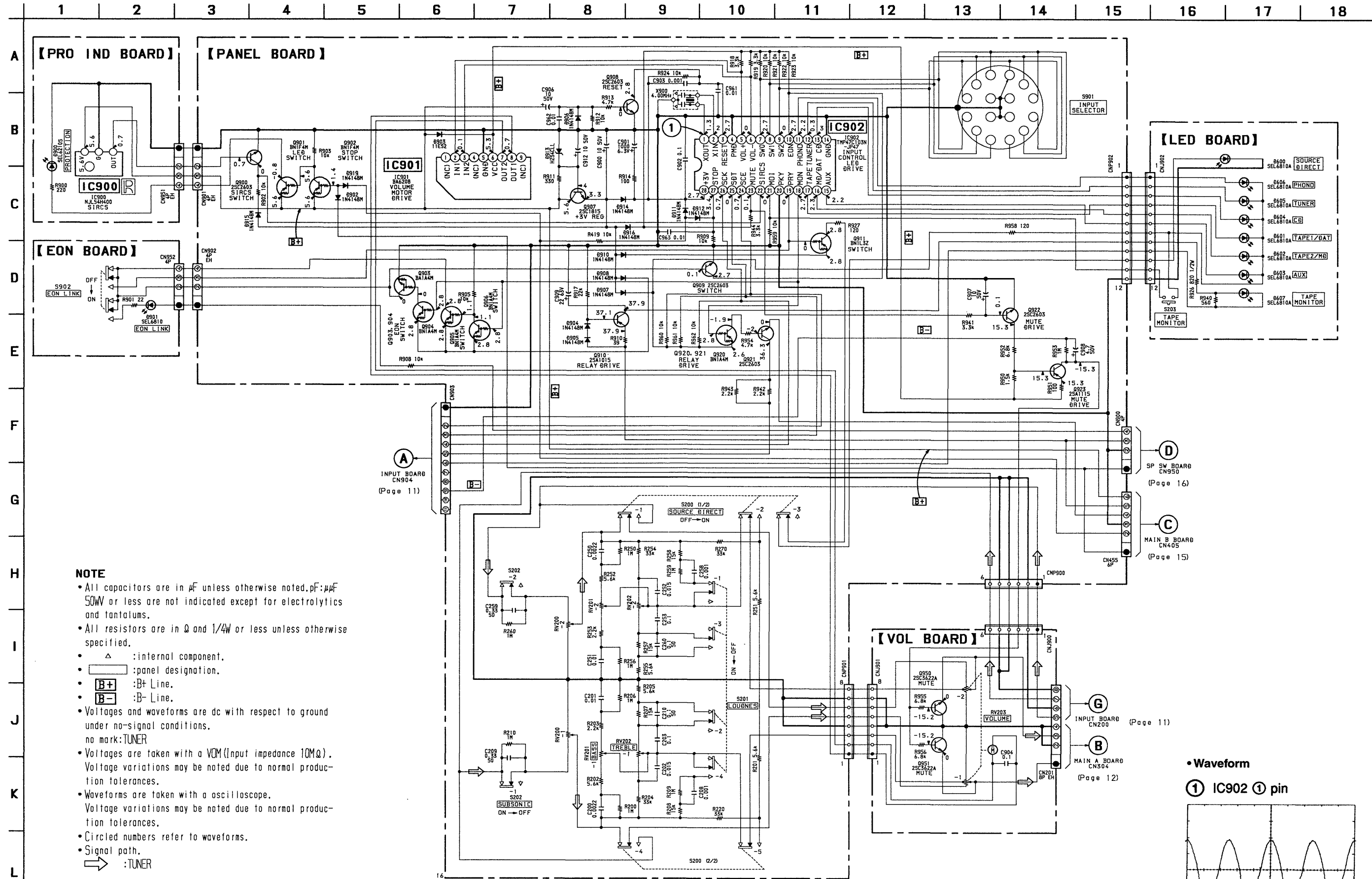
3-2. IC PIN FUNCTION

• IC902 Input Control LED Drive (TMP47C103N-JP47)

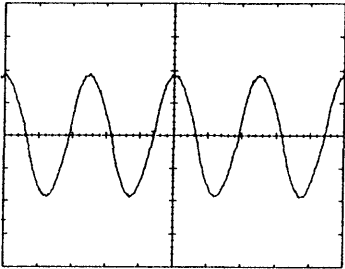
Pin No.	Pin Name	I/O	Function
1	X OUT	O	System clock. (4MHz)
2	X IN	I	
3	RESET	I	Reset input.
4	PMD	I	Mode select input.
5	VOL +	O	Motor drive output (+).
6	VOL -	O	Motor drive output (-).
7	SW 0	I	Rotary switch input (CD).
8	SW 1	I	Rotary switch input (TUNER).
9	SW 2	I	Rotary switch input (PHONO).
10	EON	I	EON signal input.
11	PHONO	O	PHONO LED drive output.
12	TUNER	O	TUNER LED drive output.
13	CD	O	CD LED drive output.
14	GND	—	Ground.
15	AUX	O	AUX LED drive output.
16	DAT	O	TAPE "2" LED drive output.
17	TAPE	O	TAPE "1" LED drive output.
18	MON	O	MONITOR output.
19	PRY	O	Power relay output.
20	PKY	I	Power key input.
21	MON	I	MONITOR input.
22	SIRCS	I	SIRCS input.
23	MUTE	O	Muting output.
24	SCE	O	Chip enable output.
25	SDT	O	Serial data output.
26	SCK	O	Serial clock output.
27	STOP	I	STOP input.
28	+3V	—	+3V Power supply.

3-3. SCHEMATIC DIAGRAM — PANEL SECTION —

• See page 6 for IC Pin Function. (IC902) • See page 15 for IC Block Diagram. (IC901)



• Waveform
① IC902 ① pin



4MHz 1.92Vp-p

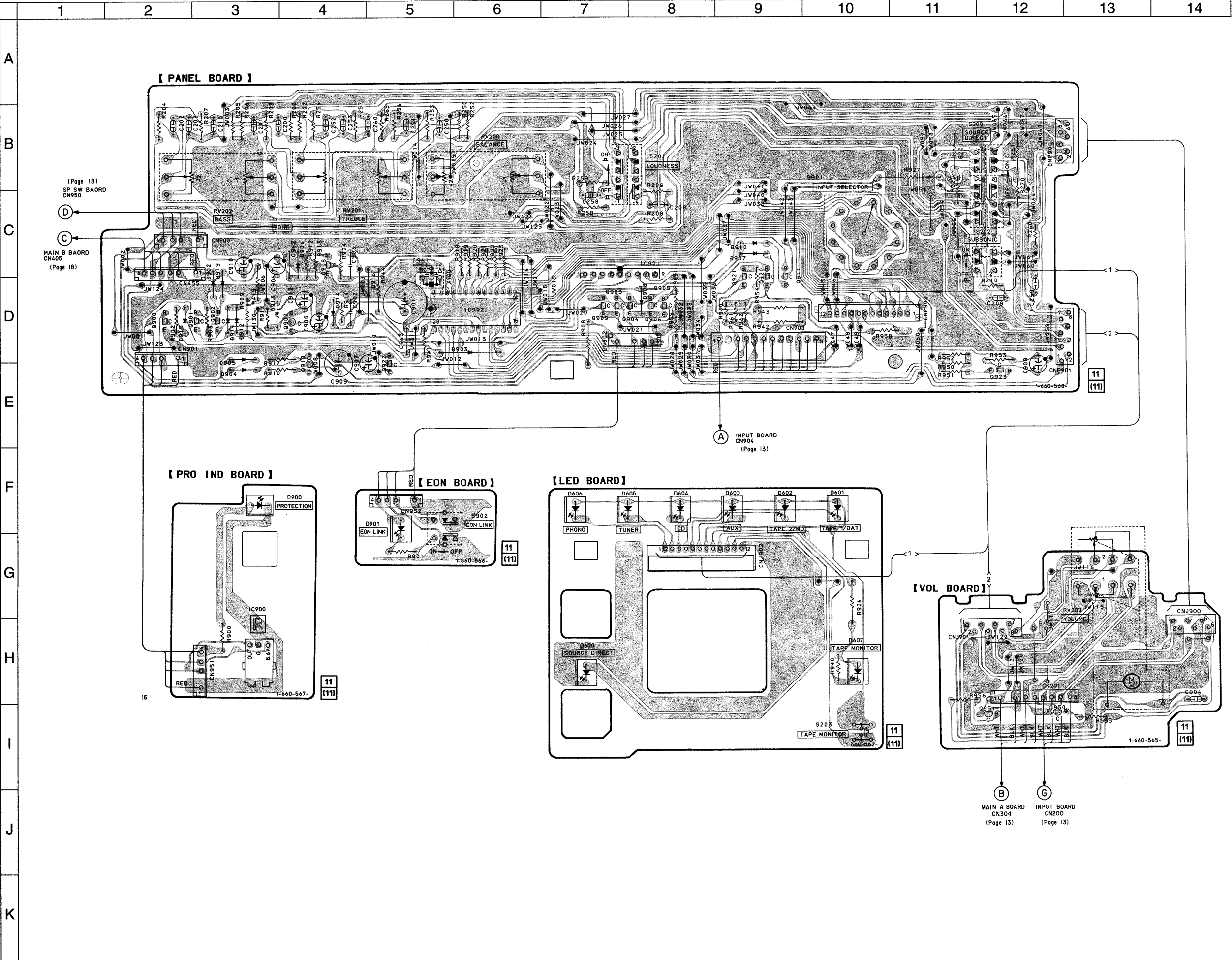
3-4. PRINTED WIRING BOARD — PANEL SECTION —

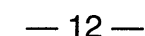
• See page 5 for Circuit Boards Location.

- Note:
- — : Parts extracted from the component side.
 - △ : Internal component.
 - — : Pattern from the side which enable seeing.

• Semiconductor Location

Ref. No.	Location
D600	H-7
D601	F-10
D602	F-9
D603	F-9
D604	F-8
D605	F-8
D606	F-7
D607	H-10
D900	F-3
D901	F-5
D902	D-3
D903	D-6
D904	E-3
D905	E-3
D906	C-4
D907	C-9
D908	D-8
D910	C-9
D911	D-3
D912	D-3
D913	D-3
D914	D-4
D915	D-2
D916	D-5
D919	D-3
IC900	H-3
IC901	C-8
IC902	D-6
Q900	D-2
Q901	D-2
Q902	D-3
Q903	D-7
Q904	D-8
Q905	D-8
Q906	D-8
Q907	D-4
Q908	C-4
Q909	D-7
Q910	E-4
Q911	D-9
Q920	D-9
Q921	D-9
Q922	E-5
Q923	E-12
Q950	I-12
Q951	I-12






3-6. PRINTED WIRING BOARD — MAIN A SECTION —

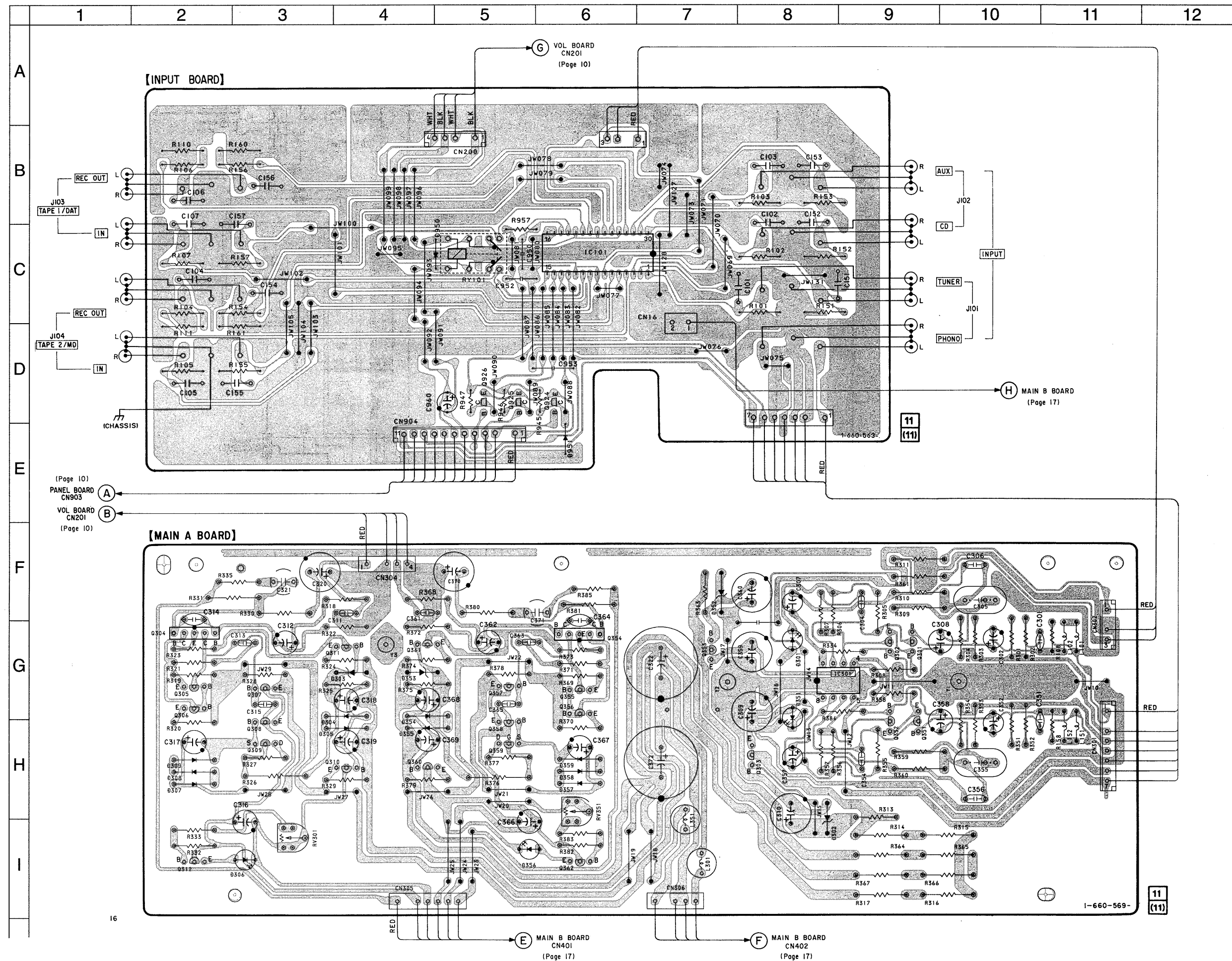
- See page 5 for Circuit Boards Location.

Note:

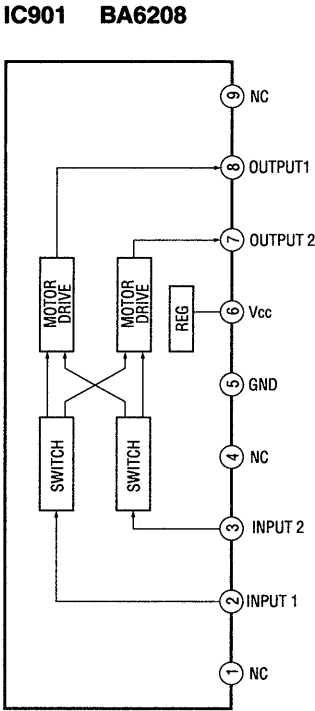
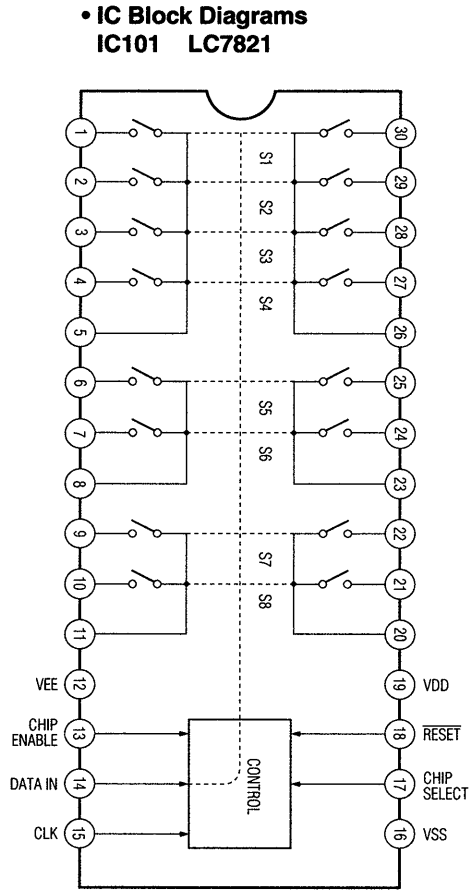
- : Parts extracted from the component side.
- : Internal component.
-  : Pattern from the side which enable seeing.

- **Semiconductor Location**

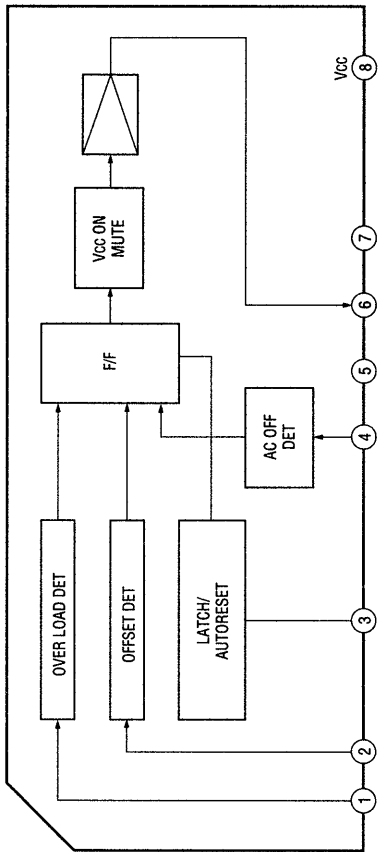
Ref. No.	Location
D301	G-8
D302	H-8
D303	G-4
D304	G-4
D305	H-4
D306	I-3
D307	H-2
D308	H-2
D309	H-2
D351	G-8
D352	F-7
D353	G-4
D354	G-4
D355	H-4
D356	I-5
D357	H-6
D358	H-6
D359	H-6
D950	C-5
D951	E-6
IC101	C-6
IC301	G-9
Q301	G-9
Q302	G-9
Q303	H-8
Q304	G-2
Q305	G-2
Q306	G-2
Q307	G-3
Q308	G-3
Q309	H-3
Q310	H-4
Q311	G-4
Q312	I-2
Q351	G-9
Q352	G-9
Q353	G-7
Q354	G-6
Q355	G-6
Q356	G-6
Q357	G-5
Q358	G-5
Q359	H-5
Q360	H-4
Q361	G-4
Q362	I-6
Q924	D-6
Q925	D-5
Q926	D-5



3-7. SCHEMATIC DIAGRAM — MAIN B SECTION —



IC401 μ PC1237HA



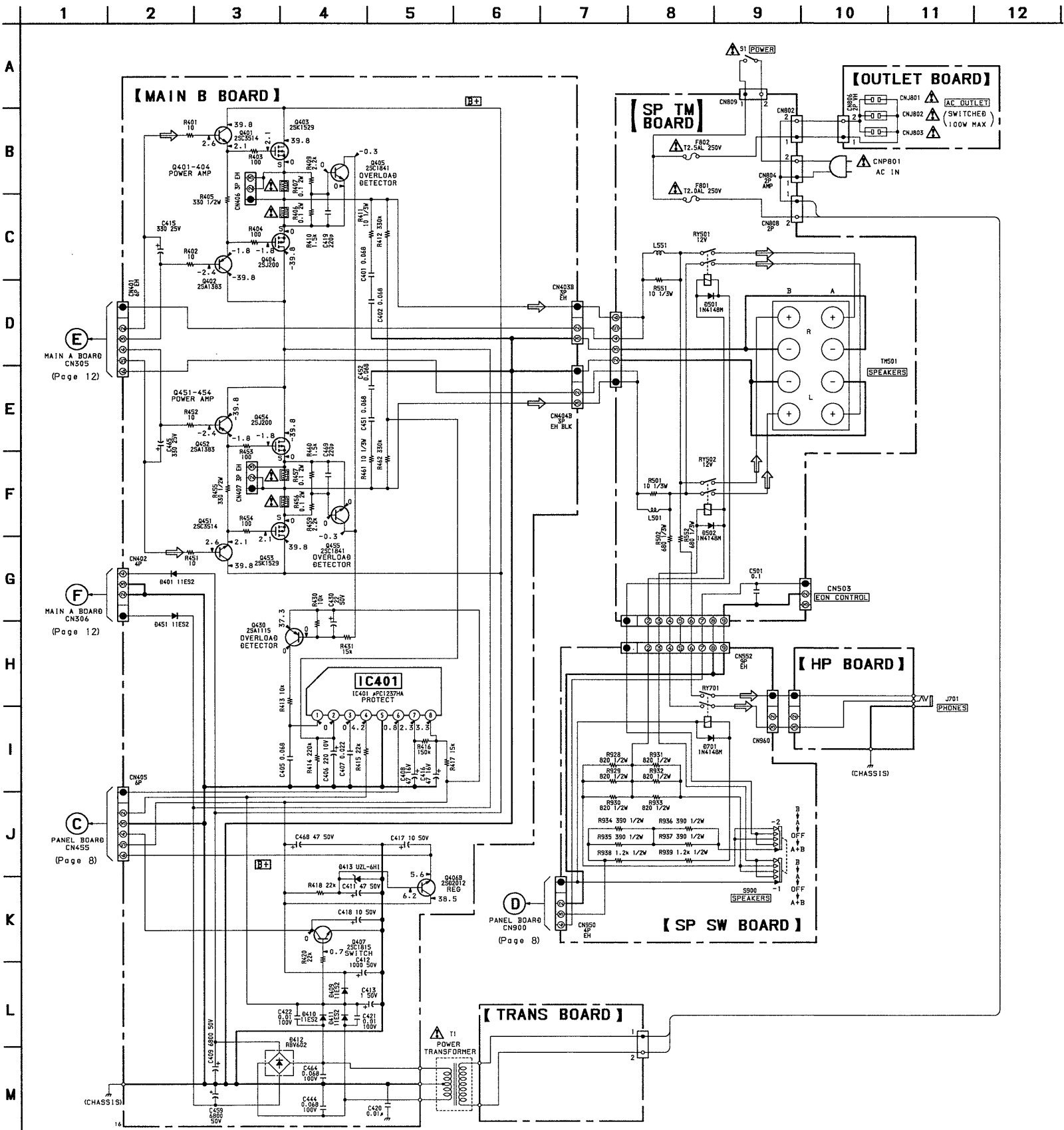
NOTE

- All capacitors are in μ F unless otherwise noted. μ F: μ F 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $1/4W$ or less unless otherwise specified.

- : nonflammable resistor.
- : panel designation.

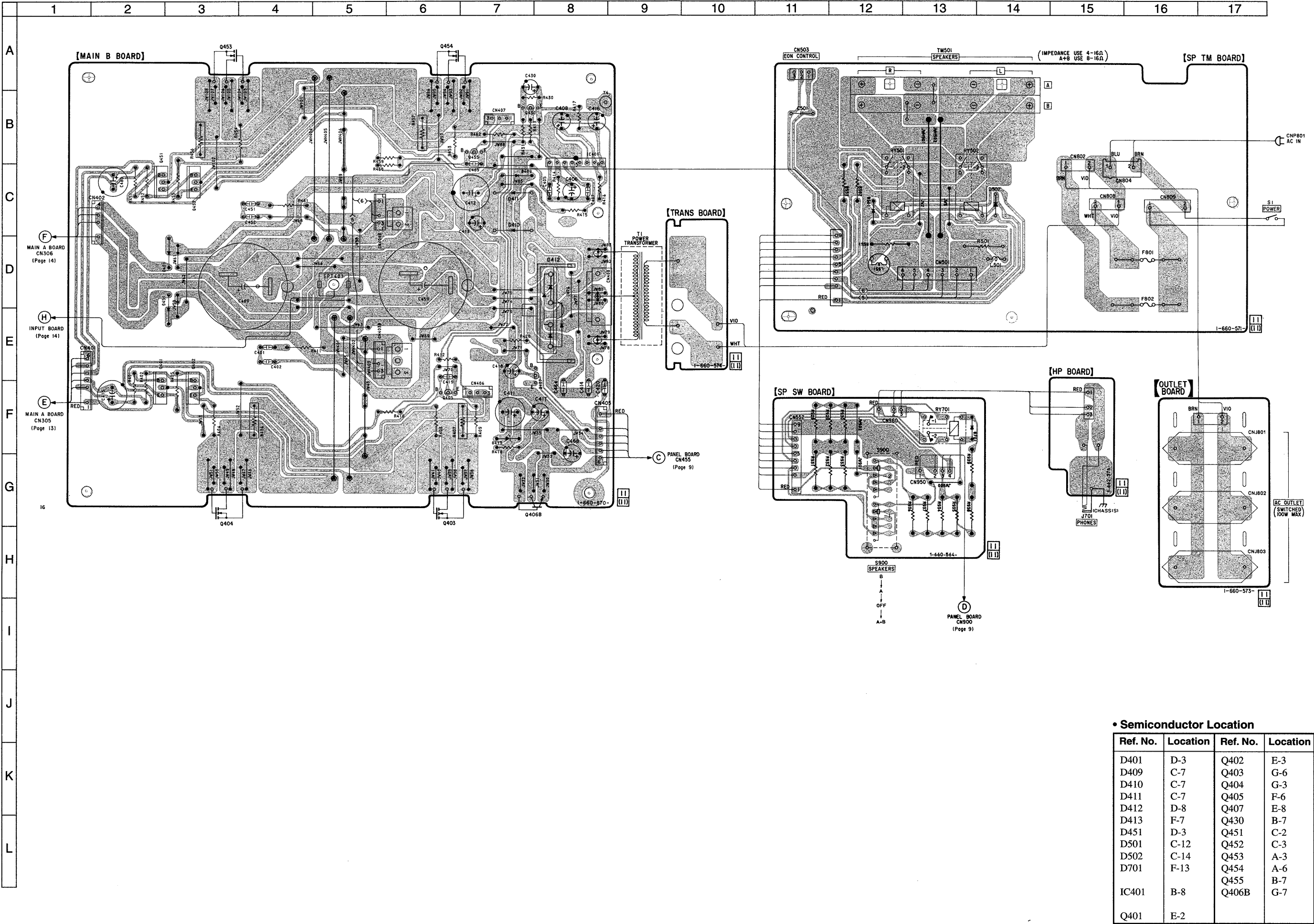
Note: The components identified by mark or dotted line with mark are critical for safety. Replace only with part number specified.

- : B+ Line.
- : B- Line.
- : adjustment for repair.
- Voltages are dc with respect to ground under no-signal conditions. no mark: TUNER
- Voltages are taken with a VOM (input impedance $10M\Omega$). Voltage variations may be noted due to normal production tolerances.
- Signal path.
- : TUNER



3-7. PRINTED WIRING BOARD — MAIN B SECTION —
• See page 5 for Circuit Boards Location.

- Note:
- — : Parts extracted from the component side.
 - △ : Internal component.
 - — : Pattern from the side which enable seeing.



SECTION 4 EXPLODED VIEWS

Note:

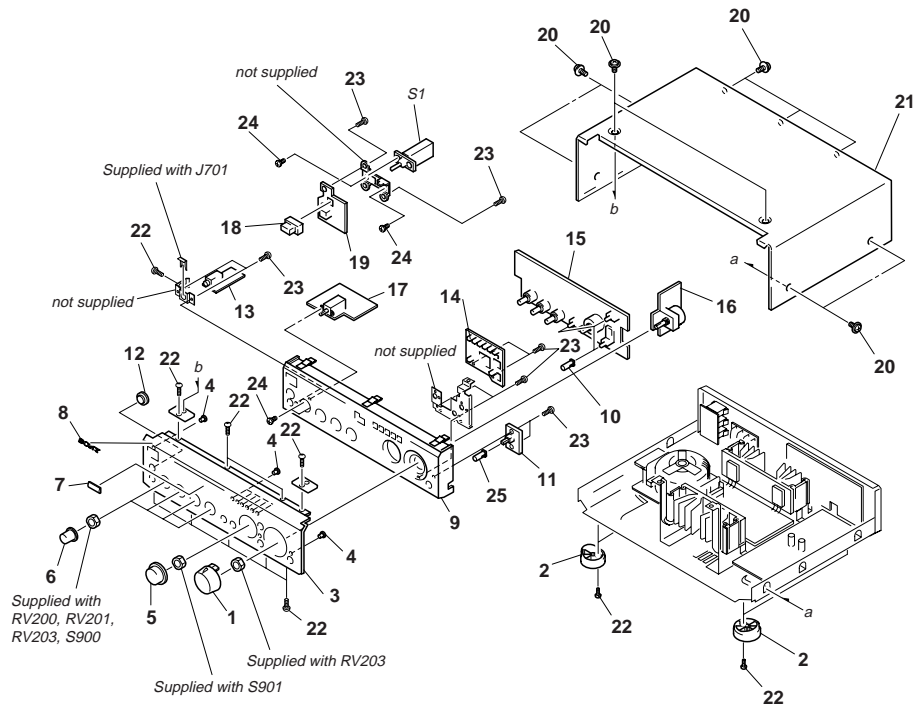
- XX, -X mean standardized parts, so they may have some differences from the original one.
- Items marked "87" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.

- Accessories and packing materials are given in the last of this parts list.
- Color Indication of Appearance Parts Example:
KNOB, BALANCE (WHITE) . . . (RED)

Parts Color Cabinet's Color

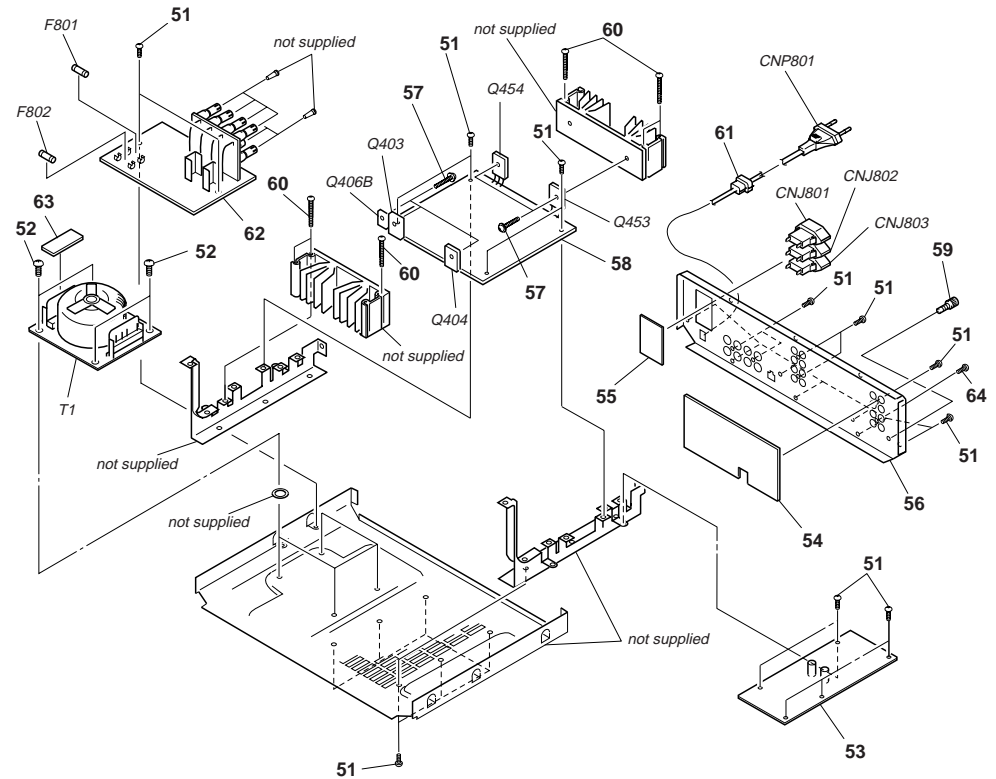
The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

4-1. FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
1	X-4946-920-1	KNOB (VOL) ASSY (VOLUME)		* 14	1-660-562-11	LED BOARD	
2	X-4947-025-1	FOOT ASSY		* 15	A-4389-795-A	PANEL BOARD, COMPLETE	
3	4-980-766-52	PANEL, FRONT		* 16	1-660-565-11	VOL BOARD	
4	4-980-775-01	LENS, LED		* 17	1-660-564-11	SP SW BOARD	
5	4-980-771-01	KNOB (DIA. 47)(INPUT SELECTOR)		18	4-980-199-01	BUTTON (POWER)	
6	4-980-204-01	KNOB (DIA. 24)(TONE,BALANCE,SPEAKERS)		* 19	1-660-567-11	PRO IND BOARD	
7	4-965-651-01	EMBLEM (POWER MOS)			3-704-366-01	SCREW (CASE) (M3X8)	
8	4-979-587-01	EMBLEM (NO.5)(SONY)		* 21	4-989-460-11	CASE	
9	X-4946-923-1	PANEL ASSY, BASE		22	4-967-961-01	SCREW (3X8)	
10	4-980-773-01	BUTTON (DIA. 6)		23	4-951-620-01	SCREW (2.6X8), +BVTP	
* 11	1-660-566-11	EON BOARD		24	7-685-872-09	SCREW +BVTT 3X8 (S)	
12	4-980-776-01	WINDOW, REMOTE CONTROL		25	4-980-189-01	KNOB (DIA. 6)(EON LINK)	
* 13	1-662-376-11	HP BOARD		Δ S1	1-554-920-11	SWITCH, PUSH (AC POWER)(1 KEY)	

4-2. CHASSIS SECTION



Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
51	4-967-961-01	SCREW (3X8)		64	3-704-515-41	SCREW (BV/RING)	
52	4-967-960-01	SCREW (4X8)		Δ CNJ801	1-526-794-11	OUTLET, AC	
* 53	A-4398-035-A	MAIN A BOARD, COMPLETE		Δ CNJ802	1-526-794-11	OUTLET, AC	
* 54	1-660-563-11	INPUT BOARD		Δ CNJ803	1-526-794-11	OUTLET, AC	
* 55	1-660-573-11	OUTLET BOARD		Δ CNP801	1-777-185-11	CORD, POWER	
* 56	4-982-977-32	PANEL, BACK		Δ F801	1-532-388-51	FUSE, TIME LAG 2.0A/250V	
57	3-905-609-11	SCREW (TRANSISTOR)		Δ F802	1-532-464-51	FUSE, TIME LAG 2.5A/250V	
* 58	A-4398-036-A	MAIN B BOARD, COMPLETE		Q403	8-729-232-45	TRANSISTOR 2SK1529-Y	
59	4-947-010-01	SCREW, FEEDER FIXED		Q404	8-729-232-46	TRANSISTOR 2SJ200-Y	
60	4-981-016-01	SCREW (H)		Q406B	8-729-209-15	TRANSISTOR 2SD2012	
* 61	3-703-244-00	BUSHING (2104), CORD		Q453	8-729-232-45	TRANSISTOR 2SK1529-Y	
* 62	1-660-571-11	SP TM BOARD		Q454	8-729-232-46	TRANSISTOR 2SJ200-Y	
* 63	1-660-574-11	TRANS BOARD		Δ T1	1-429-492-11	TRANSFORMER, POWER	

The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

SECTION 5 ELECTRICAL PARTS LIST

EON

HP

INPUT

Note:

When indicating parts by reference number, please include the board name.

The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- CAPACITORS:
uF: μ F
- RESISTORS
All resistors are in ohms.
METAL: metal-film resistor
METAL OXIDE: Metal Oxide-film resistor
F: nonflammable
- COILS
uH: μ H
- SEMICONDUCTORS
In each case, u: μ , for example:
uA...: μ A..., uPA..., μ PA...,
uPB..., μ PB..., uPC..., μ PC...,
uPD..., μ PD...

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
*	1-660-566-11	EON BOARD *****				< CONNECTOR >	
		< CONNECTOR >		CN16	1-564-320-00	PIN, CONNECTOR (B2P-VH) 2P	
				CN200	1-691-766-11	PLUG (MICRO CONNECTOR) 4P	
CN952	1-691-766-11	PLUG (MICRO CONNECTOR) 4P		CN904	1-691-773-11	PLUG (MICRO CONNECTOR) 11P	
		< DIODE >				< DIODE >	
D901	8-719-313-50	DIODE SEL6810A-TH12 (EON LINK)		D950	8-719-987-63	DIODE 1N4148M	
		< RESISTOR >		D951	8-719-987-63	DIODE 1N4148M	
						< IC >	
R901	1-249-397-11	CARBON 22 5% 1/4W F		IC101	8-759-805-13	IC LC7821	
		< SWITCH >				< JACK >	
S902	1-571-112-21	SWITCH, PUSH (1 KEY) (EON LINK)		* J101	1-573-142-11	JACK, PIN 4P (INPUT TUNER,PHONO)	
*****				* J102	1-573-142-21	JACK, PIN 4P (INPUT AUX,CD)	
				* J103	1-573-142-21	JACK, PIN 4P (TAPE 1/DAT REC OUT,IN)	
*	1-662-376-11	HP BOARD *****		* J104	1-573-142-21	JACK, PIN 4P (TAPE 2/MD REC OUT,IN)	
		< JACK >				< TRANSISTOR >	
J701	1-750-735-11	JACK (LARGE TYPE)(PHONES)		Q924	8-729-620-05	TRANSISTOR 2SC2603-EF	
*****				Q925	8-729-620-05	TRANSISTOR 2SC2603-EF	
				Q926	8-729-620-05	TRANSISTOR 2SC2603-EF	
						< RESISTOR >	
*	1-660-563-11	INPUT BOARD *****		R101	1-249-995-11	CARBON 1M 5% 1/4W	
		< CAPACITOR >		R102	1-249-995-11	CARBON 1M 5% 1/4W	
				R103	1-249-995-11	CARBON 1M 5% 1/4W	
C101	1-162-286-31	CERAMIC 220PF 10% 50V		R104	1-249-923-11	CARBON 1K 5% 1/4W	
C102	1-162-286-31	CERAMIC 220PF 10% 50V		R105	1-249-995-11	CARBON 1M 5% 1/4W	
C103	1-162-286-31	CERAMIC 220PF 10% 50V					
C104	1-162-286-31	CERAMIC 220PF 10% 50V		R106	1-249-923-11	CARBON 1K 5% 1/4W	
C105	1-162-286-31	CERAMIC 220PF 10% 50V		R107	1-249-995-11	CARBON 1M 5% 1/4W	
				R110	1-249-995-11	CARBON 1M 5% 1/4W	
C106	1-162-286-31	CERAMIC 220PF 10% 50V		R111	1-249-995-11	CARBON 1M 5% 1/4W	
C107	1-162-286-31	CERAMIC 220PF 10% 50V		R151	1-249-995-11	CARBON 1M 5% 1/4W	
C151	1-162-286-31	CERAMIC 220PF 10% 50V					
C152	1-162-286-31	CERAMIC 220PF 10% 50V		R152	1-249-995-11	CARBON 1M 5% 1/4W	
C153	1-162-286-31	CERAMIC 220PF 10% 50V		R153	1-249-995-11	CARBON 1M 5% 1/4W	
				R154	1-249-923-11	CARBON 1K 5% 1/4W	
C154	1-162-286-31	CERAMIC 220PF 10% 50V		R155	1-249-995-11	CARBON 1M 5% 1/4W	
C155	1-162-286-31	CERAMIC 220PF 10% 50V		R156	1-249-923-11	CARBON 1K 5% 1/4W	
C156	1-162-286-31	CERAMIC 220PF 10% 50V					
C157	1-162-286-31	CERAMIC 220PF 10% 50V		R157	1-249-995-11	CARBON 1M 5% 1/4W	
C950	1-162-294-31	CERAMIC 0.001uF 10% 50V		R160	1-249-995-11	CARBON 1M 5% 1/4W	
				R161	1-249-995-11	CARBON 1M 5% 1/4W	
C952	1-164-159-11	CERAMIC 0.1uF 50V		R945	1-249-429-11	CARBON 10K 5% 1/4W	
C953	1-164-159-11	CERAMIC 0.1uF 50V		R946	1-249-429-11	CARBON 10K 5% 1/4W	
C960	1-126-963-11	ELECT 4.7uF 20% 50V					
				R947	1-249-429-11	CARBON 10K 5% 1/4W	
				R957	1-249-425-11	CARBON 4.7K 5% 1/4W F	
						< RELAY >	
				RY101	1-515-614-11	RELAY	

Ref. No.	Part No.	Description	Remarks			
*	1-660-562-11	LED BOARD *****				
		< JACK >				
CNJ902	1-766-796-11	CONNECTOR, BOARD TO BOARD 12P				
		< DIODE >				
D600	8-719-313-50	DIODE	SEL6810A-TH12 (SOURCE DIRECT)			
D601	8-719-313-50	DIODE	SEL6810A-TH12 (TAPE 1/DAT)			
D602	8-719-313-50	DIODE	SEL6810A-TH12 (TAPE 2/MD)			
D603	8-719-313-50	DIODE	SEL6810A-TH12 (AUX)			
D604	8-719-313-50	DIODE	SEL6810A-TH12 (CD)			
D605	8-719-313-50	DIODE	SEL6810A-TH12 (TUNER)			
D606	8-719-313-50	DIODE	SEL6810A-TH12 (PHONO)			
D607	8-719-313-50	DIODE	SEL6810A-TH12 (TAPE 1 MONITOR)			
		< RESISTOR >				
R926	1-247-751-11	CARBON	820	5%	1/2W	
R940	1-249-414-11	CARBON	560	5%	1/4W F	
		< SWITCH >				
S203	1-554-303-21	SWITCH, TACTILE (TAPE 1 MONITOR)				

*	A-4398-035-A	MAIN A BOARD, COMPLETE *****				
		< CAPACITOR >				
C301	1-102-978-00	CERAMIC	220PF	5%	50V	
C302	1-126-059-11	ELECT	10uF	20%	50V	
C303	1-164-062-11	CERAMIC	47PF	5%	50V	
C304	1-106-359-00	MYLAR	4700PF	5%	200V	
C305	1-136-162-00	FILM	0.056uF	5%	50V	
C306	1-137-471-11	FILM	0.016uF	5%	50V	
C307	1-126-059-11	ELECT	10uF	20%	50V	
C308	1-126-022-11	ELECT	47uF	20%	25V	
C309	1-126-013-11	ELECT	1000uF	20%	16V	
C310	1-126-023-11	ELECT	100uF	20%	25V	
C311	1-102-973-00	CERAMIC	100PF	5%	50V	
C312	1-124-721-11	ELECT	10uF	20%	50V	
C313	1-164-083-11	CERAMIC	680PF	10%	50V	
C314	1-164-062-11	CERAMIC	47PF	5%	50V	
C315	1-107-589-91	CERAMIC	9PF	0.5PF	500V	
C316	1-126-023-11	ELECT	100uF	20%	16V	
C317	1-126-023-11	ELECT	100uF	20%	16V	
C318	1-126-023-11	ELECT	100uF	20%	16V	
C319	1-126-023-11	ELECT	100uF	20%	16V	
C320	1-110-393-11	ELECT	100uF	20%	63V	
C321	1-164-040-11	CERAMIC	4PF	0.25PF	50V	
C322	1-126-056-11	ELECT	1000uF	20%	50V	
C351	1-102-978-00	CERAMIC	220PF	5%	50V	
C352	1-126-059-11	ELECT	10uF	20%	50V	
C353	1-164-062-11	CERAMIC	47PF	5%	50V	
C354	1-106-359-00	MYLAR	4700PF	5%	200V	
C355	1-136-162-00	FILM	0.056uF	5%	50V	
C356	1-137-471-11	FILM	0.016uF	5%	50V	
C357	1-126-059-11	ELECT	10uF	20%	50V	
C358	1-126-022-11	ELECT	47uF	20%	25V	

Ref. No.	Part No.	Description	Remarks		
C359	1-126-013-11	ELECT 1000uF 20%	16V		
C360	1-126-023-11	ELECT 100uF 20%	25V		
C361	1-102-973-00	CERAMIC 100PF 5%	50V		
C362	1-124-721-11	ELECT 10uF 20%	50V		
C363	1-164-083-11	CERAMIC 680PF 10%	50V		
C364	1-164-062-11	CERAMIC 47PF 5%	50V		
C365	1-107-589-91	CERAMIC 9PF 0.5PF	500V		
C366	1-126-023-11	ELECT 100uF 20%	16V		
C367	1-126-023-11	ELECT 100uF 20%	16V		
C368	1-126-023-11	ELECT 100uF 20%	16V		
C369	1-126-023-11	ELECT 100uF 20%	16V		
C370	1-110-393-11	ELECT 100uF 20%	63V		
C371	1-164-040-11	CERAMIC 4PF 0.25PF	50V		
C372	1-126-056-11	ELECT 1000uF 20%	50V		
< CONNECTOR >					
CN301	1-691-769-11	PLUG (MICRO CONNECTOR) 7P			
CN302	1-691-765-11	PLUG (MICRO CONNECTOR) 3P			
< DIODE >					
D301	8-719-310-61	DIODE SEL1510C-D			
D302	8-719-933-88	DIODE HZS16-2L			
D303	8-719-933-41	DIODE HZS6C3L			
D304	8-719-987-63	DIODE 1N4148M			
D305	8-719-987-63	DIODE 1N4148M			
D306	8-719-310-61	DIODE SEL1510C-D			
D307	8-719-987-63	DIODE 1N4148M			
D308	8-719-987-63	DIODE 1N4148M			
D309	8-719-987-63	DIODE 1N4148M			
D351	8-719-310-61	DIODE SEL1510C-D			
D352	8-719-933-88	DIODE HZS16-2L			
D353	8-719-933-41	DIODE HZS6C3L			
D354	8-719-987-63	DIODE 1N4148M			
D355	8-719-987-63	DIODE 1N4148M			
D356	8-719-310-61	DIODE SEL1510C-D			
D357	8-719-987-63	DIODE 1N4148M			
D358	8-719-987-63	DIODE 1N4148M			
D359	8-719-987-63	DIODE 1N4148M			
< TERMINAL >					
* EPT401	4-924-264-21	TERMINAL, MOUNT			
< IC >					
IC301	8-759-636-74	IC M5218AP-22			
< COIL >					
L101	1-410-977-11	INDUCTOR 100uH			
L102	1-410-977-11	INDUCTOR 100uH			
L151	1-410-977-11	INDUCTOR 100uH			
L152	1-410-977-11	INDUCTOR 100uH			
L301	1-428-203-11	COIL, AIR-CORE			
L351	1-428-203-11	COIL, AIR-CORE			
< TRANSISTOR >					
Q301	8-729-281-54	TRANSISTOR 2SC1815-BL			
Q302	8-729-281-54	TRANSISTOR 2SC1815-BL			
Q303	8-729-281-54	TRANSISTOR 2SC1815-BL			
Q304	8-729-620-17	TRANSISTOR 2SC2259-FG			
Q305	8-729-201-53	TRANSISTOR 2SA1015-GR			

Ref. No.	Part No.	Description	Remarks			Ref. No.	Part No.	Description	Remarks		
Q306	8-729-201-53	TRANSISTOR	2SA1015-GR			R355	1-259-161-21	CARBON	560	5%	1/4W
Q307	8-729-201-53	TRANSISTOR	2SA1015-GR			R356	1-259-161-21	CARBON	560	5%	1/4W
Q308	8-729-021-74	TRANSISTOR	2SA949-OY-TPE6			R357	1-259-143-21	CARBON	100	5%	1/4W
Q309	8-729-202-67	TRANSISTOR	2SK246-GR3			R358	1-259-191-21	CARBON	10K	5%	1/4W
Q310	8-729-021-73	TRANSISTOR	2SC2229-OY-TPE6			R359	1-249-844-11	CARBON	56K	1%	1/2W
Q311	8-729-281-54	TRANSISTOR	2SC1815-BL			R360	1-259-320-11	CARBON	4.7K	1%	1/2W
Q312	8-729-281-54	TRANSISTOR	2SC1815-BL			R361	1-259-167-21	CARBON	1K	5%	1/4W
Q351	8-729-281-54	TRANSISTOR	2SC1815-BL			R363	1-249-943-11	CARBON	6.8K	5%	1/4W
Q352	8-729-281-54	TRANSISTOR	2SC1815-BL			R364	1-249-198-11	CARBON	330	5%	1/3W
Q353	8-729-201-53	TRANSISTOR	2SA1015-GR			R365	1-249-198-11	CARBON	330	5%	1/3W
Q354	8-729-620-17	TRANSISTOR	2SC2259-FG			R366	1-249-198-11	CARBON	330	5%	1/3W
Q355	8-729-201-53	TRANSISTOR	2SA1015-GR			R367	1-249-198-11	CARBON	330	5%	1/3W
Q356	8-729-201-53	TRANSISTOR	2SA1015-GR			R368	1-259-167-21	CARBON	1K	5%	1/4W
Q357	8-729-201-53	TRANSISTOR	2SA1015-GR			R369	1-259-151-21	CARBON	220	5%	1/4W
Q358	8-729-021-74	TRANSISTOR	2SA949-OY-TPE6			R370	1-259-151-21	CARBON	220	5%	1/4W
Q359	8-729-202-67	TRANSISTOR	2SK246-GR3			R371	1-259-151-21	CARBON	220	5%	1/4W
Q360	8-729-021-73	TRANSISTOR	2SC2229-OY-TPE6			R372	1-259-215-21	CARBON	100K	5%	1/4W
Q361	8-729-281-54	TRANSISTOR	2SC1815-BL			R373	1-259-179-21	CARBON	3.3K	5%	1/4W
Q362	8-729-281-54	TRANSISTOR	2SC1815-BL			R374	1-259-175-11	CARBON	2.2K	5%	1/4W
< RESISTOR >						R375	1-259-183-11	CARBON	4.7K	5%	1/4W
R108	1-259-436-11	CARBON	2.2K	5%	1/6W	R376	1-249-490-11	CARBON	27K	5%	1/3W
R158	1-259-436-11	CARBON	2.2K	5%	1/6W	R377	1-259-151-21	CARBON	220	5%	1/4W
R301	1-259-215-21	CARBON	100K	5%	1/4W	R378	1-259-151-21	CARBON	220	5%	1/4W
R302	1-249-911-11	CARBON	330	5%	1/4W	R379	1-249-899-11	CARBON	100	5%	1/4W F
R303	1-259-215-21	CARBON	100K	5%	1/4W	R380	1-247-749-11	CARBON	560	5%	1/2W F
R304	1-249-900-11	CARBON	110	1%	1/4W	R381	1-249-496-11	CARBON	100K	5%	1/3W
R305	1-259-161-21	CARBON	560	5%	1/4W	R382	1-259-171-21	CARBON	1.5K	5%	1/4W
R306	1-259-161-21	CARBON	560	5%	1/4W	R383	1-259-167-21	CARBON	1K	5%	1/4W
R307	1-259-143-21	CARBON	100	5%	1/4W	R384	1-259-239-11	CARBON	1M	5%	1/4W
R308	1-259-191-21	CARBON	10K	5%	1/4W	R385	1-259-143-21	CARBON	100	5%	1/4W
R309	1-249-844-11	CARBON	56K	1%	1/2W	< VARIABLE RESISTOR >					
R310	1-259-320-11	CARBON	4.7K	1%	1/2W	RV301	1-241-762-11	RES, ADJ, CARBON 2.2K			
R311	1-259-167-21	CARBON	1K	5%	1/4W	RV351	1-241-762-11	RES, ADJ, CARBON 2.2K			
R313	1-249-943-11	CARBON	6.8K	5%	1/4W	*****					
R314	1-249-198-11	CARBON	330	5%	1/3W	* A-4398-036-A MAIN B BOARD, COMPLETE					
R315	1-249-198-11	CARBON	330	5%	1/3W	*****					
R316	1-249-198-11	CARBON	330	5%	1/3W	< CAPACITOR >					
R317	1-249-198-11	CARBON	330	5%	1/3W	C401	1-136-163-00	FILM	0.068uF	5%	50V
R318	1-259-167-21	CARBON	1K	5%	1/4W	C402	1-136-163-00	FILM	0.068uF	5%	50V
R319	1-259-151-21	CARBON	220	5%	1/4W	C405	1-136-163-00	FILM	0.068uF	5%	50V
R320	1-259-151-21	CARBON	220	5%	1/4W	C406	1-126-923-11	ELECT	220uF	20%	10V
R321	1-259-151-21	CARBON	220	5%	1/4W	C407	1-136-157-00	FILM	0.022uF	5%	50V
R322	1-259-215-21	CARBON	100K	5%	1/4W	C408	1-126-967-11	ELECT	47uF	20%	16V
R323	1-259-179-21	CARBON	3.3K	5%	1/4W	C409	1-117-779-11	ELECT	6800uF	20%	50V
R324	1-259-175-11	CARBON	2.2K	5%	1/4W	C411	1-126-967-11	ELECT	47uF	20%	50V
R325	1-259-183-11	CARBON	4.7K	5%	1/4W	C412	1-126-972-11	ELECT	1000uF	20%	50V
R326	1-249-490-11	CARBON	27K	5%	1/3W	C413	1-126-960-11	ELECT	1uF	20%	50V
R327	1-259-151-21	CARBON	220	5%	1/4W	C415	1-126-025-11	ELECT	330uF	20%	25V
R328	1-259-151-21	CARBON	220	5%	1/4W	C416	1-126-967-11	ELECT	47uF	20%	16V
R329	1-249-899-11	CARBON	100	5%	1/4W F	C417	1-126-964-11	ELECT	10uF	20%	50V
R330	1-247-749-11	CARBON	560	5%	1/2W F	C418	1-126-964-11	ELECT	10uF	20%	50V
R331	1-249-496-11	CARBON	100K	5%	1/3W	C419	1-164-077-11	CERAMIC	220PF	10%	50V
R332	1-259-171-21	CARBON	1.5K	5%	1/4W	C420	1-136-153-00	FILM	0.01uF	5%	50V
R333	1-259-167-21	CARBON	1K	5%	1/4W	C421	1-137-150-11	FILM	0.01uF	5%	100V
R334	1-259-239-11	CARBON	1M	5%	1/4W	C422	1-137-150-11	FILM	0.01uF	5%	100V
R335	1-259-143-21	CARBON	100	5%	1/4W	C430	1-126-965-11	ELECT	22uF	20%	50V
R351	1-259-215-21	CARBON	100K	5%	1/4W	C444	1-137-398-11	FILM	0.068uF	5%	100V
R352	1-249-911-11	CARBON	330	5%	1/4W						
R353	1-259-215-21	CARBON	100K	5%	1/4W						
R354	1-249-900-11	CARBON	110	1%	1/4W						

MAIN B

OUTLET

PANEL

Ref. No.	Part No.	Description	Remarks			
C451	1-136-163-00	FILM	0.068uF	5%	50V	
C452	1-136-163-00	FILM	0.068uF	5%	50V	
C459	1-117-779-11	ELECT	6800uF	20%	50V	
C464	1-137-398-11	FILM	0.068uF	5%	100V	
C465	1-126-025-11	ELECT	330uF	20%	25V	
C468	1-126-967-11	ELECT	47uF	20%	50V	
C469	1-164-077-11	CERAMIC	220PF	10%	50V	
< CONNECTOR >						
CN401	1-691-768-11	PLUG (MICRO CONNECTOR) 6P				
CN402	1-691-766-11	PLUG (MICRO CONNECTOR) 4P				
CN405	1-691-768-11	PLUG (MICRO CONNECTOR) 6P				
CN406	1-564-506-11	PLUG, CONNECTOR 3P				
CN407	1-564-506-11	PLUG, CONNECTOR 3P				
CN403B	1-691-765-21	PLUG (MICRO CONNECTOR) 3P				
CN404B	1-691-765-11	PLUG (MICRO CONNECTOR) 3P				
< DIODE >						
D401	8-719-024-99	DIODE 11ES2-NTA2B				
D409	8-719-024-99	DIODE 11ES2-NTA2B				
D410	8-719-024-99	DIODE 11ES2-NTA2B				
D411	8-719-024-99	DIODE 11ES2-NTA2B				
D412	8-719-302-38	DIODE RBV-602-01				
D413	8-719-933-39	DIODE HZS6C1L				
D451	8-719-024-99	DIODE 11ES2-NTA2B				
< TERMINAL >						
* EPT401	4-924-264-21	TERMINAL, MOUNT				
< IC >						
IC401	8-759-111-68	IC uPC1237HA				
< TRANSISTOR >						
Q401	8-729-104-18	TRANSISTOR 2SC3514				
Q402	8-729-104-91	TRANSISTOR 2SA1383				
Q403	8-729-232-45	TRANSISTOR 2SK1529-Y				
Q404	8-729-232-46	TRANSISTOR 2SJ200-Y				
Q405	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA				
Q406B	8-729-209-15	TRANSISTOR 2SD2012				
Q407	8-729-281-54	TRANSISTOR 2SC1815-BL				
Q430	8-729-119-76	TRANSISTOR 2SA1175-HFE				
Q451	8-729-104-18	TRANSISTOR 2SC3514				
Q452	8-729-104-91	TRANSISTOR 2SA1383				
Q453	8-729-232-45	TRANSISTOR 2SK1529-Y				
Q454	8-729-232-46	TRANSISTOR 2SJ200-Y				
Q455	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA				
< RESISTOR >						
R401	1-249-393-11	CARBON	10	5%	1/4W	F
R402	1-249-393-11	CARBON	10	5%	1/4W	F
R403	1-249-405-11	CARBON	100	5%	1/4W	F
R404	1-249-405-11	CARBON	100	5%	1/4W	F
R405	1-247-745-11	CARBON	330	5%	1/2W	F
△ R406	1-208-601-11	WIREWOUND	0.1	10%	2W	F
△ R407	1-208-601-11	WIREWOUND	0.1	10%	2W	F
R409	1-259-436-11	CARBON	2.2K	5%	1/6W	
R410	1-259-432-11	CARBON	1.5K	5%	1/6W	
R411	1-249-162-11	CARBON	10	5%	1/3W	

Ref. No.	Part No.	Description	Remarks			
R412	1-259-488-11	CARBON	330K	5%	1/6W	
R413	1-259-452-11	CARBON	10K	5%	1/6W	
R414	1-259-484-11	CARBON	220K	5%	1/6W	
R415	1-259-460-11	CARBON	22K	5%	1/6W	
R416	1-259-480-11	CARBON	150K	5%	1/6W	
R417	1-259-456-11	CARBON	15K	5%	1/6W	
R418	1-259-460-11	CARBON	22K	5%	1/6W	
R420	1-259-460-11	CARBON	22K	5%	1/6W	
R430	1-259-452-11	CARBON	10K	5%	1/6W	
R431	1-259-456-11	CARBON	15K	5%	1/6W	
R451	1-249-393-11	CARBON	10	5%	1/4W	F
R452	1-249-393-11	CARBON	10	5%	1/4W	F
R453	1-249-405-11	CARBON	100	5%	1/4W	F
R454	1-249-405-11	CARBON	100	5%	1/4W	F
R455	1-247-745-11	CARBON	330	5%	1/2W	F
△ R456	1-208-601-11	WIREWOUND	0.1	10%	2W	F
△ R457	1-208-601-11	WIREWOUND	0.1	10%	2W	F
R459	1-259-436-11	CARBON	2.2K	5%	1/6W	
R460	1-259-432-11	CARBON	1.5K	5%	1/6W	
R461	1-249-162-11	CARBON	10	5%	1/3W	
R462	1-259-488-11	CARBON	330K	5%	1/6W	

*	1-660-573-11	OUTLET BOARD				

< JACK >						
△ CNJ801	1-526-794-11	OUTLET, AC				
△ CNJ802	1-526-794-11	OUTLET, AC				
△ CNJ803	1-526-794-11	OUTLET, AC				

*	A-4389-795-A	PANEL BOARD, COMPLETE				

< CAPACITOR >						
C200	1-130-475-00	MYLAR	0.0022uF	5%	50V	
C201	1-136-153-00	FILM	0.01uF	5%	50V	
C202	1-136-155-00	FILM	0.015uF	5%	50V	
C203	1-136-165-00	FILM	0.1uF	5%	50V	
C208	1-130-471-00	MYLAR	0.001uF	5%	50V	
C209	1-136-171-00	FILM	0.33uF	5%	50V	
C210	1-136-165-00	FILM	0.1uF	5%	50V	
C250	1-130-475-00	MYLAR	0.0022uF	5%	50V	
C251	1-136-153-00	FILM	0.01uF	5%	50V	
C252	1-136-155-00	FILM	0.015uF	5%	50V	
C253	1-136-165-00	FILM	0.1uF	5%	50V	
C258	1-130-471-00	MYLAR	0.001uF	5%	50V	
C259	1-136-171-00	FILM	0.33uF	5%	50V	
C260	1-136-165-00	FILM	0.1uF	5%	50V	
C900	1-126-964-11	ELECT	10uF	20%	50V	
C901	1-126-916-11	ELECT	1000uF	20%	6.3V	
C902	1-164-159-11	CERAMIC	0.1uF		50V	
C903	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C906	1-126-964-11	ELECT	10uF	20%	50V	
C907	1-126-964-11	ELECT	10uF	20%	50V	

The components identified by mark △ or dotted line with mark △ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
C908	1-126-963-11	ELECT	4.7uF 20% 50V	< RESISTOR >			
C909	1-128-551-11	ELECT	22uF 20% 63V	R200	1-259-500-11	CARBON 1M 5%	1/6W
C910	1-126-933-11	ELECT	100uF 20% 10V	R201	1-259-446-11	CARBON 5.6K 5%	1/6W
C912	1-126-964-11	ELECT	10uF 20% 50V	R202	1-259-446-11	CARBON 5.6K 5%	1/6W
C961	1-162-306-11	CERAMIC	0.01uF 20% 16V	R203	1-259-436-11	CARBON 2.2K 5%	1/6W
C962	1-162-306-11	CERAMIC	0.01uF 20% 16V	R204	1-259-464-11	CARBON 33K 5%	1/6W
C963	1-162-306-11	CERAMIC	0.01uF 20% 16V	R205	1-259-446-11	CARBON 5.6K 5%	1/6W
< CONNECTOR >				R206	1-259-500-11	CARBON 1M 5%	1/6W
CN455	1-691-768-11	PLUG (MICRO CONNECTOR) 6P		R207	1-259-456-11	CARBON 15K 5%	1/6W
CN900	1-691-766-11	PLUG (MICRO CONNECTOR) 4P		R208	1-259-456-11	CARBON 15K 5%	1/6W
CN901	1-691-766-21	PLUG (MICRO CONNECTOR) 4P		R209	1-259-500-11	CARBON 1M 5%	1/6W
CN902	1-691-766-11	PLUG (MICRO CONNECTOR) 4P		R210	1-259-500-11	CARBON 1M 5%	1/6W
* CN903	1-564-527-11	PLUG, CONNECTOR 12P		R220	1-259-464-11	CARBON 33K 5%	1/6W
* CNP900	1-568-318-21	PLUG, CONNECTOR 6P		R250	1-259-500-11	CARBON 1M 5%	1/6W
* CNP901	1-568-320-11	PLUG, CONNECTOR 8P		R251	1-259-446-11	CARBON 5.6K 5%	1/6W
CNP902	1-774-936-11	CONNECTOR, BOARD TO BOARD 12P		R252	1-259-446-11	CARBON 5.6K 5%	1/6W
< DIODE >				R253	1-259-436-11	CARBON 2.2K 5%	1/6W
D902	8-719-987-63	DIODE 1N4148M		R254	1-259-464-11	CARBON 33K 5%	1/6W
D903	8-719-024-99	DIODE 11ES2-NTA2B		R255	1-259-446-11	CARBON 5.6K 5%	1/6W
D904	8-719-987-63	DIODE 1N4148M		R256	1-259-500-11	CARBON 1M 5%	1/6W
D905	8-719-987-63	DIODE 1N4148M		R257	1-259-456-11	CARBON 15K 5%	1/6W
D906	8-719-987-63	DIODE 1N4148M		R258	1-259-456-11	CARBON 15K 5%	1/6W
D907	8-719-987-63	DIODE 1N4148M		R259	1-259-500-11	CARBON 1M 5%	1/6W
D908	8-719-987-63	DIODE 1N4148M		R260	1-259-500-11	CARBON 1M 5%	1/6W
D910	8-719-987-63	DIODE 1N4148M		R270	1-259-464-11	CARBON 33K 5%	1/6W
D911	8-719-987-63	DIODE 1N4148M		R419	1-249-429-11	CARBON 10K 5%	1/4W
D912	8-719-987-63	DIODE 1N4148M		R902	1-249-429-11	CARBON 10K 5%	1/4W
D913	8-719-985-59	DIODE HZS4CLL		R903	1-249-429-11	CARBON 10K 5%	1/4W
D914	8-719-987-63	DIODE 1N4148M		R905	1-249-429-11	CARBON 10K 5%	1/4W
D915	8-719-987-63	DIODE 1N4148M		R908	1-249-429-11	CARBON 10K 5%	1/4W
D916	8-719-987-63	DIODE 1N4148M		R909	1-249-429-11	CARBON 10K 5%	1/4W
D919	8-719-987-63	DIODE 1N4148M		R910	1-249-400-11	CARBON 39 5%	1/4W F
< IC >				R911	1-249-411-11	CARBON 330 5%	1/4W
IC901	8-759-962-08	IC BA6208		R912	1-249-429-11	CARBON 10K 5%	1/4W
IC902	8-759-392-41	IC TMP47C103N-JP47		R913	1-249-425-11	CARBON 4.7K 5%	1/4W F
< TRANSISTOR >				R914	1-247-807-31	CARBON 100 5%	1/4W
Q900	8-729-620-05	TRANSISTOR 2SC2603-EF		R917	1-249-433-11	CARBON 22K 5%	1/4W
Q901	8-729-900-63	TRANSISTOR DTA124ES		R918	1-247-843-11	CARBON 3.3K 5%	1/4W
Q902	8-729-900-63	TRANSISTOR DTA124ES		R919	1-247-843-11	CARBON 3.3K 5%	1/4W
Q903	8-729-900-80	TRANSISTOR DTC114ES		R920	1-249-429-11	CARBON 10K 5%	1/4W
Q904	8-729-422-57	TRANSISTOR UN4111		R921	1-249-429-11	CARBON 10K 5%	1/4W
Q905	8-729-422-57	TRANSISTOR UN4111		R922	1-249-429-11	CARBON 10K 5%	1/4W
Q906	8-729-422-57	TRANSISTOR UN4111		R923	1-249-429-11	CARBON 10K 5%	1/4W
Q907	8-729-119-78	TRANSISTOR 2SC2785-HFE		R924	1-249-429-11	CARBON 10K 5%	1/4W
Q908	8-729-620-05	TRANSISTOR 2SC2603-EF		R927	1-249-406-11	CARBON 120 5%	1/4W F
Q909	8-729-620-05	TRANSISTOR 2SC2603-EF		R941	1-247-843-11	CARBON 3.3K 5%	1/4W
Q910	8-729-201-53	TRANSISTOR 2SA1015-GR		R942	1-247-756-11	CARBON 2.2K 5%	1/2W
Q911	8-729-142-36	TRANSISTOR BN1L3Z		R943	1-247-756-11	CARBON 2.2K 5%	1/2W
Q920	8-729-422-57	TRANSISTOR UN4111		R944	1-247-843-11	CARBON 3.3K 5%	1/4W
Q921	8-729-620-05	TRANSISTOR 2SC2603-EF		R950	1-249-419-11	CARBON 1.5K 5%	1/4W F
Q922	8-729-620-05	TRANSISTOR 2SC2603-EF		R951	1-247-807-31	CARBON 100 5%	1/4W
Q923	8-729-119-76	TRANSISTOR 2SA1175-HFE		R952	1-249-427-11	CARBON 6.8K 5%	1/4W F
				R953	1-247-903-00	CARBON 1M 5%	1/4W
				R954	1-249-425-11	CARBON 4.7K 5%	1/4W F
				R958	1-249-406-11	CARBON 120 5%	1/4W F
				R959	1-249-429-11	CARBON 10K 5%	1/4W
				R960	1-249-429-11	CARBON 10K 5%	1/4W
				R961	1-249-429-11	CARBON 10K 5%	1/4W
				R962	1-249-429-11	CARBON 10K 5%	1/4W

PANEL	PRO IND	SP SW	SP TM	TRANS
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Ref. No.	Part No.	Description	Remarks
< VARIABLE RESISTOR >			
RV200	1-223-933-21	RES, VAR, CARBON 250K/250K (BALANCE)	
RV201	1-223-934-21	RES, VAR, CARBON 250K/250K (TREBLE)	
RV202	1-223-935-21	RES, VAR, CARBON 900K/900K (BASS)	
< SWITCH >			
S200	1-571-828-11	SWITCH, PUSH (1 KEY)(SOURCE DIRECT)	
S201	1-762-387-11	SWITCH, PUSH (LOUDNESS)	
S202	1-571-112-21	SWITCH, PUSH (1 KEY)(SUBSONIC)	
S901	1-692-974-11	SWITCH, ROTARY (INPUT SELECT)	
< VIBRATOR >			
X900	1-577-358-21	VIBRATOR, CERAMIC 4MHz	

*	1-660-567-11	PRO IND BOARD	

< CONNECTOR >			
CN951	1-691-766-21	PLUG (MICRO CONNECTOR) 4P	
< DIODE >			
D900	8-719-313-48	DIODE SEL6210S-TH12 (PROTECTION)	
< IC >			
IC900	8-759-373-49	IC NJL54H400	
< RESISTOR >			
R900	1-249-409-11	CARBON 220 5% 1/4W F	

*	1-660-564-11	SP SW BOARD	

< CONNECTOR >			
CN552	1-691-771-11	PLUG (MICRO CONNECTOR) 9P	
CN950	1-691-766-11	PLUG (MICRO CONNECTOR) 4P	
CN960	1-691-765-11	PLUG (MICRO CONNECTOR) 3P	
< DIODE >			
D701	8-719-987-63	DIODE 1N4148M	
< RESISTOR >			
R928	1-247-751-11	CARBON 820 5% 1/2W	
R929	1-247-751-11	CARBON 820 5% 1/2W	
R930	1-247-751-11	CARBON 820 5% 1/2W	
R931	1-247-751-11	CARBON 820 5% 1/2W	
R932	1-247-751-11	CARBON 820 5% 1/2W	
R933	1-247-751-11	CARBON 820 5% 1/2W	
R934	1-247-746-11	CARBON 390 5% 1/2W F	
R935	1-247-746-11	CARBON 390 5% 1/2W F	
R936	1-247-746-11	CARBON 390 5% 1/2W F	
R937	1-247-746-11	CARBON 390 5% 1/2W F	
R938	1-247-753-11	CARBON 1.2K 5% 1/2W	
R939	1-247-753-11	CARBON 1.2K 5% 1/2W	

Ref. No.	Part No.	Description	Remarks
< RELAY >			
RY701	1-515-614-11	RELAY	
< SWITCH >			
S900	1-762-654-11	SWITCH, ROTARY SLIDE (SPEAKERS)	

*	1-660-571-11	SP TM BOARD	

	1-533-233-11	HOLDER, FUSE	
< CAPACITOR >			
C501	1-164-159-11	CERAMIC 0.1uF	50V
< CONNECTOR >			
CN503	1-566-212-11	PIN, CONNECTOR 3P	
CN802	1-564-321-00	PIN, CONNECTOR 2P	
CN804	1-580-230-11	PIN, CONNECTOR (PC BOARD) 2P	
* CN808	1-564-321-21	PIN, CONNECTOR 2P	
* CN809	1-565-792-11	PIN, CONNECTOR 2P	
< DIODE >			
D501	8-719-987-63	DIODE 1N4148M	
D502	8-719-987-63	DIODE 1N4148M	
< FUSE >			
△ F801	1-532-388-51	FUSE, TIME LAG 2.0A/250V	
△ F802	1-532-464-51	FUSE, TIME LAG 2.5A/250V	
< COIL >			
L501	1-411-906-11	COIL, AIR-CORE	
L551	1-411-906-11	COIL, AIR-CORE	
< RESISTOR >			
R501	1-249-162-11	CARBON 10 5% 1/3W	
R502	1-247-750-11	CARBON 680 5% 1/2W F	
R551	1-249-162-11	CARBON 10 5% 1/3W	
R552	1-247-750-11	CARBON 680 5% 1/2W F	
< RELAY >			
RY501	1-515-921-11	RELAY (12V)	
RY502	1-515-921-11	RELAY (12V)	
< TERMINAL >			
* TM501	1-537-519-11	TERMINAL BOARD (SPEAKERS)	

*	1-660-574-11	TRANS BOARD	

< TRANSFORMER >			
△ T1	1-429-492-11	TRANSFORMER, POWER	

The components identified by mark △ or dotted line with mark △ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
*	1-660-565-11	VOL BOARD *****				MISCELLANEOUS *****	
		< CAPACITOR >					
C904	1-136-165-00	FILM 0.1uF 5% 50V		△CNJ801	1-526-794-11	OUTLET, AC	
		< CONNECTOR >		△CNJ802	1-526-794-11	OUTLET, AC	
CN201	1-691-770-11	PLUG (MICRO CONNECTOR) 8P		△CNJ803	1-526-794-11	OUTLET, AC	
		< JACK >		△CNP801	1-777-185-11	CORD, POWER	
CNJ900	1-568-317-11	SOCKET, CONNECTOR 6P		△F801	1-532-388-51	FUSE, TIME LAG 2.0A/250V	
CNJ901	1-568-319-11	SOCKET, CONNECTOR 8P					
		< TRANSISTOR >		△F802	1-532-464-51	FUSE, TIME LAG 2.5A/250V	
Q950	8-729-141-26	TRANSISTOR 2SC3622A-LK		Q403	8-729-232-45	TRANSISTOR 2SK1529-Y	
Q951	8-729-141-26	TRANSISTOR 2SC3622A-LK		Q404	8-729-232-46	TRANSISTOR 2SJ200-Y	
		< RESISTOR >		Q406B	8-729-209-15	TRANSISTOR 2SD2012	
				Q453	8-729-232-45	TRANSISTOR 2SK1529-Y	
				Q454	8-729-232-46	TRANSISTOR 2SJ200-Y	
		< VARIABLE RESISTOR >		△S1	1-554-920-11	SWITCH, PUSH (AC POWER)(1 KEY)	
				△T1	1-429-492-11	TRANSFORMER, POWER	

						ACCESSORIES & PACKING MATERIALS	

R955	1-249-427-11	CARBON 6.8K 5% 1/4W F		1-473-656-11		REMOTE COMMANDER (RM-S316)	
R956	1-249-427-11	CARBON 6.8K 5% 1/4W F		3-860-499-11		MANUAL, INSTRUCTION	
						(ENGLISH,FRENCH,SPANISH,PORTUGUESE)	
				3-860-499-21		MANUAL, INSTRUCTION	
						(GERMAN,DUTCH,SWEDISH,ITALIAN)	
RV203	1-225-227-11	RES, VAR, CARBON 120K/120K (VOLUME)		4-981-643-01		COVER, BATTERY (FOR RM-S316)	

The components identified by mark △ or dotted line with mark △ are critical for safety.
Replace only with part number specified.

